## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **LISTING OF CLAIMS:**

1-6. (Canceled).

7. (New) An infrared source for a gas sensor comprising:

a first layer having first transmission characteristics; and a second layer having second transmission characteristics, wherein a combination of the first and the second transmission characteristics effects a bandpass filter characteristics for an operating frequency range.

- 8. (New) The infrared source according to claim 7, wherein the first transmission characteristics with respect to the operating frequency range provides a higher transmission for shorter wavelengths, and the second transmission characteristics with respect to the operating frequency range provides a higher transmission for longer wavelengths.
- 9. (New) The infrared source according to claim 7, wherein the first layer includes glass, and the second layer includes one of silicon and germanium.
- 10. (New) A gas sensor comprising:

an infrared source:

a detector; and

an interference filter situated between the infrared source and the detector,

wherein the infrared source includes:

a first layer having first transmission characteristics, and a second layer having second transmission characteristics, wherein a combination of the first and the second transmission

characteristics effects a bandpass filter characteristics for an operating frequency range.

- 11. (New) The gas sensor according to claim 10, wherein the operating frequency range of the infrared source includes exactly one pass frequency of the interference filter.
- 12. (New) The gas sensor according to claim 10, wherein the interference filter is a Fabry-Perot filter.